

REMARKS

Claims 1-26 are active in the present application.

At the outset, Applicants wish to thank Examiner Szekely for the helpful and courteous discussion with their undersigned Representative on November 13, 2003. During this discussion various amendments and arguments were discussed to address the objections to the claims, the indefiniteness rejections, and the rejections over the art of record. The content of this discussion is reflected by the amendments and remarks set forth herein.

Applicants also wish to thank Examiner Szekely for the indication that Claims 1-15, 17, 21, 24, and 25 are allowed (Office Action dated September 11, 2003, page 4, paragraph 13).

Favorable reconsideration and allowance of all of the claims is solicited.

The rejections of (a) Claims 16, 18, 20, and 22 under 35 U.S.C. §102(b) over Podszun et al, and (b) Claims 16, 18-20, 22, and 23 under 35 U.S.C. §103(a) over Podszun et al and Denkinger et al is traversed.

The Examiner points to Podszun et al as disclosing polymer beads having an average diameter of 5-500 μm admixed with a polymerized (meth)acrylic acid ester and/or aluminum hydroxide. Podszun et al is also cited for disclosing products containing the same.

Denkinger et al is cited as disclosing a PAMA plastisol made out of acrylic bead polymers having a particle size of 10-30 μm . Denkinger et al is also cited for disclosing products containing the same.

Although the Examiner concedes novelty of the claimed method (i.e., Claims 1-15 and 25), he further notes that in order for the product of a product-by-process claim to be

distinguishable over the art of record, it is the product that must be patentably distinct.

However, Applicants note that MPEP §2113 states:

“The structure implied by the process steps should be considered when assessing the patentability of product-by-process claims over the prior art, especially where... the manufacturing process steps would be expected to impart distinctive structural characteristics to the final product. See, e.g. *In re Garnero*, 412 F.2d 276, 279, 162 USPQ 221, 223 (CCPA 1979)... The Board stated that the dispositive issue is whether the claimed factor exhibits any unexpected properties compared with the factor disclosed by the prior art.” (citing *Ex parte Gray*, 10 USPQ2d 1922 (Bd. Pat. App. & Inter. 1989)

In view of the comparative data set forth in the Declaration under 37 C.F.R. 1.132 **submitted herewith**, Applicants note that they have met their burden of demonstrating the that a product as claimed in Claims 16, 18-20, 22 and 23 do, *in fact*, possess an unexpected property when dispersing the mixture at a shear rate $\geq 10^3 \text{ s}^{-1}$ as compared to a shear rate below this claimed range.

Specifically, the enclosed Declaration under 37 C.F.R. 1.132 establishes that the process of the present invention imparts surprisingly superior properties upon the mixture obtained thereby and the products containing the same. Specifically, the process of the present invention surprisingly permits the recovery of bead polymers that exhibit a narrow size distribution and a smaller particle size as compared to that which is conventionally obtainable.

The data in the table on page 3 of the Declaration under 37 C.F.R. 1.132 arise from the step: “dispersing said mixture at a shear rate $\geq 10^3 \text{ s}^{-1}$ to form a dispersion, wherein said dispersion is stabilized by said aluminum compound” in the claimed method. These data in the table on page 3 of the Declaration under 37 C.F.R. 1.132 show that the bead polymers having an average particle size within the range of 5-40 μm possess the aforementioned unexpected properties when dispersing the mixture at a shear rate $\geq 10^3 \text{ s}^{-1}$ as compared to a

shear rate that is below this claimed range. These test results also show that the scattering beads prepared by the process of the present invention and compounded into moulding compositions (Example 1 of the present invention) scatter the light very effectively without substantial energy loss (i.e., the energy half-value angle is much poorer when the shear rate is less than $\geq 10^3$ s⁻¹).

In view of the foregoing, and the results set forth in the enclosed Declaration under 37 C.F.R. 1.132, Applicants submit that they have met their burden as established by MPEP §2113 (see above). In particular, Applicants have demonstrated that the claimed process does impart some distinctive structural characteristics to the final product of the product-by-process claim. As such, these grounds of rejection should be withdrawn.

Acknowledgment that these grounds of rejection have been withdrawn is requested.

The rejection of Claim 19 under 35 U.S.C. §112, second paragraph, is obviated by amendment.

Claim 19 has been amended to recite the chemical name in place of the acronym "PAMA."

Withdrawal of this ground of rejection is requested.

Applicants submit herewith substitute drawings that are believed to fully address and overcome the draftspersons' objections. An indication to this effect is requested.

The objections to the specification and to Claim 26 are obviated by amendment. Applicants wish to thank Examiner Szekely for his kind suggestion to overcome these

grounds of objection. Acknowledgment that these objections have been withdrawn is solicited.

Applicants submit that the present application is now in condition for allowance. Early notification of such action is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Norman F. Oblon
Attorney of Record
Registration No. 24,618

Vincent K. Shier, Ph.D.
Registration No. 50,552

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413-2220
(OSMMN 08/03)
NFO/VKS